- 38 -

ACCESS DRIVEN FILTERING

ABSTRACT

A test domain configuration module generates graphical user interfaces for identifying information about desired tests such as data types and domain

5 configurations, and collects information used by other modules to generate tests. The identified information may include, for example, an abstract syntax, a static semantic, max counts on instances of data types, or costs of field accesses or data types for max path costs or max expression costs. A test input generator, generates test input for the identified and configured data types. In one case, the generated test inputs are

10 generated as tree data structures. A predicate determines whether a generated test input follows semantic conditions. A test input evaluator counts instances of data types in, sums paths through, or sums total costs of, the generated test inputs. A test acceptance module saves test inputs acceptable to the predicate and the test input evaluator.